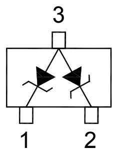
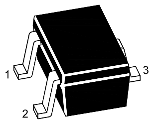
ESD6V8CAW

SILICON EPITAXIAL PLANAR DIODES

For protecting against ESD





SOT-323 Plastic Package

Marking Code: MB

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{stg}	- 55 to + 125	°C

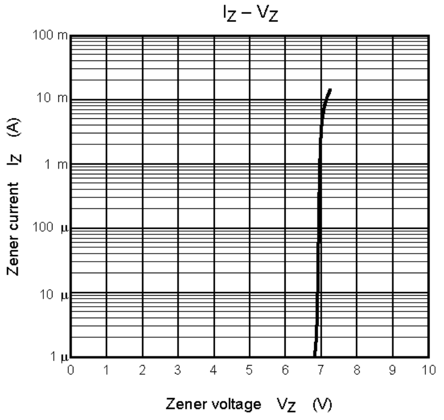
Electrical Characteristics at T_a = 25 °C

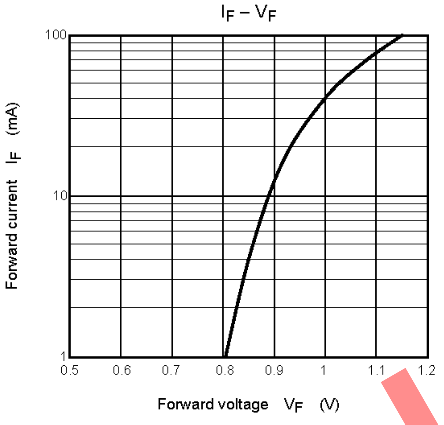
Parameter	Symbol	Min.	Typ.	Max.	Unit
Zener Voltage [1] at I_Z = 5 mA	V_Z	6.5	6.8	7.1	V
Dynamic Impedance at I_Z = 5 mA	Z_Z	-	-	50	Ω
Knee Dynamic Impedance at I_Z = 0.5 mA	Z_{ZK}	-	-	100	Ω
Reverse Current at V_R = 5 V	I_R	-	-	0.5	µA
Total Capacitance at V_R = 0 V, f = 1 MHz	C_T	-	6	-	pF

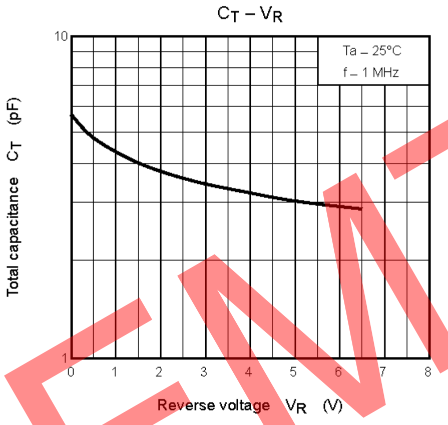
[1] Tested with pulses tp = 20 ms.

ESD Immunity Level

Parameter	Value	Unit
ESD Immunity Level at IEC61000-4-2 (Contact Discharge)	± 8	KV


$I_Z - V_Z$
Zener current I_Z (A)
100 m
10 m
1 m
100 μ
10 μ
1 μ
0
1
2
3
4
5
6
7
8
9
10
Zener voltage V_Z (V)


$I_F - V_F$
Forward current I_F (mA)
100
10
1
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
Forward voltage V_F (V)


$C_T - V_R$
Ta = 25°C
f = 1 MHz
Total capacitance C_T (pF)
10
1
0
1
2
3
4
5
6
7
8
Reverse voltage V_R (V)